

18th February 2019

18th February 2019 Page 1 of 9

Table of Contents

VHEREAS	3
SENERAL PROVISIONS	6
Article 1 Subject matter and scope	6
Article 2 Definitions	6
NTRADAY COUPLING MODEL FOR GREECE ITALY CCR	6
Article 3	6
Article 4	7
Article 5	8
INAL PROVISION	9
Article 6 Language	9

WHEREAS

- (1) This document (hereafter referred to as "Complementary Regional Auctions proposal for Greece-Italy CCR", or "CRIDA proposal"), is a common proposal developed by Nominated Electricity Market Operators (hereafter referred to as "NEMOs") and the Transmission System Operators (hereafter referred to as "TSOs") of Greece-Italy (hereafter referred to as "GRIT CCR") for the design and implementation of Complementary Regional Auctions according to Article 63 of Regulation (EU) 2015/1222 on Capacity Allocation and Congestion Management (the "CACM Regulation").
- (2) According to Article 63(1) of the CACM Regulation, the CRIDA proposal shall be subject to consultation in accordance with Article 12 of the CACM Regulation.
- (3) According to Article 9(1) of the CACM Regulation, where a proposal needs to be developed and agreed by more than one TSO or NEMO, TSOs and NEMOs shall closely cooperate to develop a common methodology.
- (4) According to Article 9(7f) of the CACM Regulation, the CRIDA proposal shall be subject to approval by all National Regulatory Authorities (hereinafter: "NRAS") of the concerned region.
- (5) According to Article 9(9) of the CACM Regulation, a timeline for implementation of the proposed Complementary Regional Auctions for GRIT CCR has to be included.
- (6) According to Article 9(9) of the CACM Regulation, the expected impact of the CRIDA proposal for GRIT CCR on the objectives of the CACM Regulation has to be described. The impact is presented below (point 7 of the Whereas section).
- (7) The CRIDA proposal for GRIT CCR contributes to and does not in any way hinder the achievement of the objectives of Article 3 of CACM Regulation. The proposal fulfils the objectives set out in Article 3 of CACM Regulation:
 - Article 3(a) of CACM Regulation aims at promoting effective competition in the generation, trading and supply of electricity.
 - The complementary regional intraday auctions are open to all market participants with no additional requirements compared to those for participation to the national intraday markets. By performing a capacity calculation before a complementary regional intraday auction, the probability of offering additional capacities to the market is higher and therefore increases the competition in the generation, trading and supply of electricity across market areas for the intraday timeframe.
 - Article 3(b) of CACM Regulation aims at ensuring optimal use of the transmission infrastructure.
 - Complementary regional intraday auctions are preceded by an updated capacity calculation with the best forecast from TSOs on the available cross border capacities for the market time units (MTU) traded in the auctions. Combining this updated calculation followed an implicit auction, this ensures the optimization of generation and supply across the region and an optimal use of the transmission infrastructure.
 - Article 3(c) of CACM Regulation aims at ensuring operational security.
 - Complementary regional intraday auctions are preceded by an updated capacity calculation with the best forecast from TSOs on the available cross border capacities for the MTU traded in the auctions. In this way it will be ensured that the allocation of intraday capacity will consider possible security constraints.
 - Article 3(d) of CACM Regulation aims at optimising the calculation and allocation of cross-zonal capacity.
 - Complementing continuous trading by complementary regional intraday auctions TSOs ensure the most efficient capacity calculation possible in the intraday timeframe since this decreases the uncertainty on the forecast of net position used for the calculation.
 - The implicit allocation of cross-zonal capacities ensures also an efficient pricing of the cross-zonal capacity since it will reflect the market congestion and amount to the difference between the corresponding intraday clearing prices of the respective bidding zones. By applying the same principles for capacity allocation and pricing of capacity as in day-ahead timeframe, where possible using existing technical solutions, NEMOs and TSOs are willing to facilitate the participation of market parties in these complementary regional intraday auctions.
 - Pursuant to Article 3(e), CACM Regulation aims at ensuring fair and non-discriminatory treatment of TSOs,
 NEMOs, the Agency, regulatory authorities and market participants.

18th February 2019 Page 3 of 9

Using common European mechanism for capacity allocation (IT assets, procedures and solutions used for the European single intraday coupling and single day ahead coupling Target Model) ensures that none of the TSOs, NEMOs, the Agency, regulatory authorities and market participants is discriminated. Complementary regional intraday auctions shall be performed in compliance with transparent market rules that are approved by the relevant national regulatory authorities after a consultation period.

 Article 3(f) of CACM Regulation aims at ensuring and enhancing the transparency and reliability of information.

Complementary regional intraday auctions shall be performed in compliance with transparent market rules that are approved by the relevant national regulatory authorities after a consultation period.

• Article 3(g) of CACM Regulation aims at contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union.

As a result of an updated calculation of the available cross-zonal capacities with the best forecast of the network situation before an implicit allocation, the pricing of the cross-zonal capacity will reflect more efficiently the market congestion. This allows a more realistic valuation of the congestion income in the intraday timeframe on the region that could be invested in the development of the electricity transmission system in accordance with EU Regulation 714/2009.

 Article 3(h) of CACM Regulation aims at respecting the need for a fair and orderly market and fair and orderly price formation.

The market is open for all market participants as long as they fulfil the requirements to participate in the national intraday market. The price formation will be performed via the implicit auction which will ensure an efficient allocation of intraday capacities according to the direction of market price differences.

Article 3(i) of the CACM Regulation aims at creating a level playing field for NEMOs.

Using a common European mechanism for capacity allocation (IT assets, procedures and solutions used for the European single intraday coupling and single day ahead coupling Target Model) ensures that none of the NEMOs involved is discriminated.

• Article 3(j) of the CACM Regulation aims at providing non-discriminatory access to cross-zonal capacity.

Using a common European mechanism for capacity allocation (IT assets, procedures and solutions used for the European single intraday coupling and single day ahead coupling Target Model) ensures that none of the NEMOs or market participants involved are discriminated. Complementary regional intraday auctions shall be performed in compliance with transparent market rules that are approved by the relevant national regulatory authorities after a consultation period.

- (8) The CRIDA proposal was consulted by the concerned NEMOs and TSOs from December 6th 2016 until January 13th 2017, in line with Article 63 and Article 12 of CACM Regulation1. The first CRIDA proposal was sent on February 14th 2017 to the concerned NRAs. The proposal included planned timescales for its implementation and a description of its expected impact on the objectives of CACM Regulation, in line with Article 9(9) of CACM Regulation.
- (9) Article 9(10) of CACM Regulation requires concerned NRAs to consult and closely cooperate and coordinate with each other in order to reach agreement, and make decisions within six months following receipt of submissions of the last concerned Regulatory Authority. A decision was therefore required by each Regulatory Authority by September 22nd 2017.
- (10) On August 1st 2017, a request for amendment on the CRIDA proposal was received by the relevant TSOs and NEMOs.
- (11) Article 9(12) of CACM Regulation requires the relevant TSOs and NEMOs to submit a proposal for amended methodologies for approval to the concerned NRAs within two months following the requirement from the NRAs. The competent regulatory authorities shall decide on the amended methodologies within two months following their submission. In this case, the amended CRIDA proposal was sent to the concerned NRAs on October 9th, 2017, which then should adopt a decision by December 19th, 2017.
- (12) The concerned NRAs requested ACER to provide a six months extension of the period for reaching an agreement on the amended CRIDA proposal according to Article 8(1) of Regulation 713/2009. This extension was requested due to the interlink of CRIDA proposal with other proposals developed in the framework of the CACM Regulation

18th February 2019 Page 4 of 9

- implementation (notably, proposal for Intraday Cross Zonal Gate Opening and Closure Times, according to Article 59 of CACM Regulation, the proposal for Intraday Cross Zonal Capacity Pricing, according to Article 55 of CACM Regulation, as well as, the proposal for Common Capacity Calculation Methodologies, according to Article 20 of CACM Regulation). The extension was adopted on December 21st, 2017 for the GRIT CCR (ACER Decision No 10/2017) and on January 10th, 2018 for the Italy North CCR (ACER Decision No 01/2018).
- (13) Upon the decision of Italian parties to join 3rd wave of XBID go-live which is foreseen in Q2 2020, Austrian and Slovenian TSOs and NEMOs decided to move Austrian-Slovenian border in LIP 15, which will join 2nd wave of XBID go live.
- (14) On July 18th 2018, a second request for amendment on the CRIDA proposal was received by the relevant TSOs and NEMOs. The amended CRIDA proposal was sent to the concerned NRAs on September 18th 2018.
- (15) On 18th of June 2018, due to the spin-off of the branch of LAGIE in accordance with the provisions of Law 4512/2018, Hellenic Energy Exchange S.A. (HEnEx) was established. According to the said Law, all legal relationships (obligations and rights) pertaining to the branch of LAGIE, as well as the NEMO designation, are transferred to HEnEx as the legal successor of LAGIE.
- (16) On December 18th, a third request for amendment on the CRIDA proposal was received by the relevant TSOs and NEMOs.
- (17) This document is the amended CRIDA proposal based on the third request for amendment. Differently from the previous versions, this proposal does not include the Italy-North Capacity Calculation Region, as requested by the concerned NRAs. Therefore, the implementation of an intraday allocation mechanism on the borders related to the Italy–North Capacity Calculation Region is out of scope of this proposal and will be part of a separate proposal among parties of the Italy-North Capacity Calculation Region.

18th February 2019 Page 5 of 9

GENERAL PROVISIONS

Article 1

Subject matter and scope

- 1. As required under Article 63(1) of the CACM Regulation, the relevant NEMOs and TSOs on bidding zone borders may jointly submit a common proposal for the design and implementation of complementary regional intraday auctions by 18 months after the entry into force of CACM.
- This Proposal is the common proposal of relevant TSOs and NEMOs of the GRIT CCR in accordance with Article 63
 of CACM Regulation. The Proposal includes the implementation of continuous energy trading mechanism
 accommodating the implicit allocation of the intraday cross-zonal capacity and the implementation of
 Complementary Regional Intraday Auction Mechanism on GRIT CCR.
- 3. CACM Regulation defines, among others, the requirements for the single intraday coupling ("SIDC") which relies on a continuous energy trading mechanism. In addition, as required under Art 55 (3) of the CACM Regulation, all TSOs shall develop by 24 months after the entry into force of CACM a single methodology for pricing intraday crosszonal capacity that shall reflect market congestion and be based on actual orders ("the Pricing of Intraday Capacity"). The Pricing of Intraday Capacity methodology has been submitted by all TSOs to NRAs' approval. Following a joint request from the NRAs, on 24th January 2019 ACER adopted a decision on the proposal for the pricing of Intraday Capacity methodology.

Article 2

Definitions

- 1. For the purpose of this proposal, the definitions in Article 2 of the CACM Regulation shall apply.
- 2. In addition, the following definitions shall apply:
 - a. 'ADMIE' means IPTO Independent Power Transmission Operator, the Greek system operator;
 - b. 'TERNA' means TERNA S.p.A. Rete Elettrica Nazionale, the Italian system operator.

Individually referred to as "TSO" and/or collectively referred to as "TSOs".

- a. 'GME' means Gestore dei Mercati Energetici S.p.A., the Italian Power Exchange;
- b. 'HEnEX' means the Hellenic Energy Exchange S.A., the Hellenic Power Exchange;

Individually referred to as "NEMO" and/or collectively referred to as "NEMOs";

INTRADAY COUPLING MODEL FOR GREECE ITALY CCR

Article 3

Single Intraday Coupling

- 1. NEMOs and TSOs of the NWE+ Region have developed a mechanism for the single intraday coupling, (SIDC) solution, which aims to be part of the target model for single intraday coupling. The SIDC will be adopted by all EU NEMOs/TSOs for continuous energy trading mechanism. Local implementation of the SIDC solution is organized on a local basis within Local Implementation Projects (LIPs).
- 2. The NEMOs and TSOs of the GRIT and Italy North CCRs have launched a LIP. The aim of the LIP is to set up all the steps required to implement both the SIDC and complementary regional intraday auctions. Local implementation of the SIDC solution is organized on a local basis in abovementioned LIP.
- 3. For the GRIT CCR, the SIDC is interrupted for the time needed for the execution of the complementary regional intraday auctions defined in Article 4.

18th February 2019 Page 6 of 9

Article 4

Complementary Intraday Regional Auctions

- 1. The NEMOs and TSOs of the GRIT CCR developed a common proposal for complementary regional intraday auctions as foreseen in Article 63 (2) of the CACM regulation. In order to provide an efficient allocation procedure (also allowing pricing) for intraday cross-zonal capacity, NEMOs and TSOs of the GRIT CCR aim at designing and implementing a complementary regional Intraday Auction Mechanism.
- 2. The Implicit Auction guarantees the efficient allocation of the cross zonal capacity, according to the price differences between the zones and increasing the social welfare.
- 3. Complementary regional intraday auctions would be performed based on last updated capacity calculations for the Intraday timeframe as required by Article 14 (1), (2) and (4) in CACM except for the first auction at 15:00.
- 4. When the approved methodology related to Art 55 (3) of the CACM Regulation is implemented, the proposed complementary regional intraday auctions foreseen in this Article shall be replaced with the auctions for the Pricing of the Intraday Capacity.
- 5. A first complementary regional intraday auction shall be performed at 15:00 in the day preceding the delivery day. This auction shall allocate the intraday cross-zonal capacity for all 24 MTUs of the delivery day. The available cross-zonal capacities shall be provided by participating TSOs or coordinated capacity calculators of GRIT CCR to the relevant NEMOs no later than 14:45 in the day previous to the delivery day.
- 6. Results of the complementary regional intraday auction defined in Article 4.5 shall be published no later than 15:30 in the day previous to the delivery day.
- 7. A second complementary regional intraday auction shall be performed at 22:00 in the day previous to the delivery day. This auction shall allocate the intraday cross-zonal capacity for all 24 MTUs of the delivery day. The available cross-zonal capacities as a result of an intraday capacity calculation shall be provided by participating TSOs or coordinated capacity calculators of GRIT CCR to the relevant NEMOs no later than 21:45 in the day previous to the delivery day.
- 8. Results of the complementary regional intraday auction defined in Article 4.7 shall be published no later than 22:30 in the day previous to the delivery day.
- 9. A third complementary regional intraday auction in day D shall be performed at 10:00 in the delivery day. This auction shall allocate the intraday cross-zonal capacity for the 12 MTUs of delivery starting from 12:00 to 24:00 of the delivery day. The available cross-zonal capacities shall be provided by participating TSOs or coordinated capacity calculators of GRIT CCR to the relevant NEMOs no later than 09:45 in the delivery day.
- 10. Results of the complementary regional intraday auction defined in Article 4.10 shall be published no later than 10:30 in the delivery day.
- 11. In case of inability of the complementary regional intraday auctions to produce results by the deadlines defined respectively in Article 4.6, 4.8 and 4.11, there is no specific fall-back solution applied as all the available cross-zonal capacities will be allocated in the SIDC.
- 12. The Intraday Cross-Zonal Gate Opening Time for the complementary regional intraday auctions shall be set as follows:
 - i. For the first complementary regional intraday auction (15:00) at 13:00 in day D-1.
 - ii. For the second complementary regional auction (22:00) at 15:30 in day D-1.
 - iii. For the third complementary regional auction (10:00) at 22:30 in day D-1.
- 13. If updates to cross-zonal capacity are required, due to operational changes on the transmission system, each TSO or coordinated capacity calculator shall notify the relevant NEMOs.
- 14. The continuous SIDC trading is allowed for all the 24 MTUs of the day from the Intraday Cross-Zonal Gate Opening Time till the Intraday Cross-Zonal Gate Closure Time. (IDCZGOT and IDCZGCT approved according to article 59.1 of CACM regulation). However, in order to hold the complementary regional intraday auctions, the cross-zonal trade and cross-zonal capacity allocation within the continuous SIDC shall be temporarily stopped in the involved borders and market zones. The overall duration of the interruption is expected to last approximately 45 minutes for each auction, provided that 15 minutes shall be used for pre-coupling phase and 30 minutes for the coupling phase.

18th February 2019 Page 7 of 9

Such estimation is based on the duration expected for each step to be performed in the CRIDA, as listed as follow and as detailed in the Explanatory Note:

- i. CZC to be communicated from TSOs to NEMOs 15 minutes before the GCT
- ii. Algorithm¹ to be run, starting at GCT, for 10 to 15 minutes, in case only hourly products and a very limited set of block products are available
- iii. Checking and sending of the results for allocated cross-zonal capacities for 10 to 15 minutes

With reference to the 10 minutes max. interruption of SIDC, as foreseen in article 63(2) of the CACM Regulation, it is worth mentioning that, based on the operational procedures currently used in the coupled auction-based markets, timings of step iii) is already optimized and cannot be further decreased. A possible roadmap to reduce the 45 minutes interruption of SIDC may be limited to the optimization of the algorithm in step ii) and CZC communication in step i), being understood that:

- CRIDAs will use the existing PCR assets which are also used for Single Day-Ahead Coupling, which
 already foresees an R&D activity aimed at optimizing computational timings and process of Single
 Day-Ahead Coupling as well. As a consequence, outcome of such an R&D activities in terms of
 optimisation of timings for computation and other processes will be benefited by CRIDAs as well;
- Parties will commit to explore any possibility to reduce the interruption of SIDC, as much as
 possible provided that CRIDA operations will not be put at any risk, aiming at implementing a
 reduction within 12 months after the CRIDAs go live on all borders covered in this proposal while
 ensuring robustness and security of the overall coupling process
- CZC will be published just before the gate closure for CRIDA bid submission. In this way the interruption of the continuous SIDC in the pre-coupling phase will be limited to few minutes.
- 15. The timings indicated in the present Article could be subject to amendments in order to accommodate operational needs.
- 16. The tradable products would be a subset of the ones supported by the Single Day-Ahead Coupling pursuant to the Article 40 of the CACM regulation, and will take into account the selection of products in relation to the calculation time as defined in the CACM regulation.
- 17. Price limits of the Complementary Regional auction should be aligned with the ones to be adopted in the SIDC.

Article 5

Implementation of Intraday Coupling model for Greece Italy CCR

- 1. The SIDC mechanism and the complementary regional intraday auction mechanism can be implemented in several steps and on a border per border basis. TSOs and NEMOs of GRIT CCR may implement complementary regional intraday auctions at the same time of the continuous SIDC mechanism.
- Complementary regional intraday auction could be based on governance, IT assets, procedures and solutions including the Day-Ahead matching algorithm and the tradable products already used in the European Single DayAhead Coupling and will take into account the selection of products in relation to the calculation time as defined
 in the CACM Article 40.
- 3. Parties will take into account the provisions which will be defined with reference to the Pricing of the Intraday Capacity required by CACM regulation and also other regional auction initiatives when approved by NRAs. The parties have already taken into account the methodology for the Pricing of the Intraday Capacity required by CACM in this proposal for the GRIT CCR. For the avoidance of doubt, it is foreseen that the implementation of the complementary regional intraday auction would be introduced before the implementation of the Intraday Capacity Pricing mechanism.

18th February 2019 Page 8 of 9

_

¹ The assumption is that the operations of CRIDAs are performed in line with the procedures and by adopting the IT solution of the Day-Ahead coupling.

FINAL PROVISION

Article 6

Language

1. The reference language for this CRIDA proposal shall be English. For the avoidance of doubt, where TSOs or NEMOs need to translate this proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 9 (14) of the CACM Regulation and any version in another language the relevant TSOs shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the GRIT CCR CRIDA proposal.

18th February 2019 Page 9 of 9